DOCUMENT RESUME

ED 306 068 RC 017 086

AUTHOR Foote, Victoria M.; And Others
TITLE The KEY Program: A University/School Partnership.
PUB DATE Aug 88
NOTE 7p.; In: Changing Roles in Education and Training. Proceedings of the Conference on Teaching at a Distance (4th, Madison, Wisconsin, August 2-4, 1988). University of Wisconsin-Madison, 1988, p125-129).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Advanced Courses; Audiovisual Instruction; *College School Cooperation; *Computer Networks; Cooperative Programs; *Distance Education; Educational Technology; Experimental Teaching; High Schools; *Institutional Cooperation; Instructional Innovation; Online Systems; *Program Development; Shared Resources and Services; Teleconferencing; *Telecourses
IDENTIFIERS Rochester Institute of Technology NY

ABSTRACT

This paper describes the KEY Program as a successful cooperative effort of the Rochester (New York) Institute of Technology (RIT) and the Livingston-Steuben-Wyoming Board of Cooperative Educational Services (LSW-BOCES). The KEY Program's primary mission is to expand course offerings to high school students in the Rochester area through distance delivery systems. LSW-BOCES worked with RIT and several high schools to coordinate the distance learning programs. The first courses offered through the KEY Program were taught at the first-year college level using videotapes, live two-way audioconferences, computer conferencing, electronic mail, study guides, texts, and other instructional materials. The program offered a pilot social studies course and later expanded to offer other courses in English and mathematics. Student and teacher responses to the pilot course were favorable. The students found videotapes to be the least helpful part of the course, but teachers felt the videotapes provided an important addition to the students' learning. Beginning in fall 1988, PC-based telewriter systems are to be made available to enhance the faculty lectures. A close working relationship among schools, RIT, and LSW-BOCES was found to be essential to the KEY Program's success. (TES)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED306068

The KEY Program:
A University/School Partnership

by
Victoria M. Foote

Susan M. Rogers

Dr. Per Omland

Linda Sundlof

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☑ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Victoria M. Foote

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

RC 017086

The KEY Program:
A University/School Partnership

Victoria M. Foote, Distance Learning Coordinator for the College of Continuing Education, Rochester Institute of Technology.
Susan M. Rogers, Director of Distance Learning Projects, Rochester Institute of Technology.
Dr. Per Omland, Superintendent, Perry Central School District.
Linda Sundlof, Coordinator of Distance Learning Programs, Livingston-Steuben-Wyoming BOCES.

Introduction

The KEY Program is a cooperative effort of the Rochester Institute of Technology and the Livingston-Steuben-Wyoming BOCES. Its primary mission is to offer enhanced opportunities to the high school students in this area. Beginning in January, 1988 courses were offered at three sites: Letchworth, Perry, and Warsaw Junior-Senior High Schools.

Since the 1982-1983 school year, the three school districts have been working together with the Livingston-Steuben-Wyoming BOCES district to expand course offerings to their high school seniors. Because they had allowed students in grade 8 to take courses at the grade 9 level several years earlier, they were faced with a need to provide fifth year coursework.

In addition, guidance surveys of graduating students indicated a need for advanced courses to allow college-bound students the same advantages available to students in larger school districts. Faced with small numbers of students (4 to 10 pupils per class), distances which prohibited transporting students, and the new requirements of the Regents Action Plan, the schools have turned to distance delivery techniques to expand their offerings.

L.S.W. BOCES

The function of a BOCES (Board of Cooperative Educational Services) is to provide services and programs for its component school districts which the districts could not operate individually. Budget, personnel or facilities needs for some programs are so large that they are best done on a regional basis, with a number of school districts sharing the cost. If two or more school districts within a BOCES catchment area request an educational or inservice program, and it meets the requirements set forth by BOCES of the New York State Education Department, it can become a "BOCES program." BOCES in New York State provide a wide range of services to their component districts, including education of special populations (e.g. developmentally disabled, occupational programs), curriculum and staff development, and instructional resources such as computer support and repair, and film/video libraries.

The provision/coordination of distance learning programs is a natural BOCES service. For the KEY Program, the L.S.W. BOCES has worked with the schools to assess their needs and, working closely with the classroom teachers, students and RIT faculty, assure that their program needs are being met.

Service to the "special population" of college-bound students could be very expensive to the individual school district. Small enrollment and specialized-subject classes can be costly for small, rural schools to support without sharing resources. BOCES aids this by coordinating

RC017086

schedules and delivery systems among the participating schools. The BOCES initiates orders for equipment and materials, and uses its videotape duplication facilities to create copies of instructional tapes for each school. BOCES personnel also act as a resource for the operation of computers and other equipment used in the instructional program. Finally, as mandated by the state, the BOCES conducts periodic review of the program, and initiates and coordinates changes, as necessary, which can improve the program.

RIT

RIT has a long tradition of responsiveness and service to the educational needs of its region. For the past several years, RIT has offered courses to students where they live and work using a variety of electronic delivery techniques. Begun in 1980 with 56 students in two courses delivered via cable television, RIT's distance learning effort has grown to involve hundreds of students in a large number of credit courses. Delivery techniques now include cable and broadcast television, videotapes (in 4 learning centers and at home), audio-conferencing, audiotapes, videoconferencing, remote access to the library catalog, and computer conferencing and electronic mail.

RIT has been interested in increasing its involvement with area secondary schools. The university's capability, experience and commitment to delivering high-quality credit courses at a distance, places it in a position to meet the needs of the L.S.W. BOCES area schools.

KEY Program Courses

Courses offered through the KEY Program are taught at the first year college level. These courses are carefully designed by university faculty in cooperation with teachers in the schools and the BOCES/RIT KEY Program administrative staff to ensure that the standards are identical to those sections taught by faculty on campus and that they meet all state requirements.
Students may take the courses for school credit, and courses are constructed in such a way that Advanced Placement credit may be earned by taking the College Board AP Exam and receiving a satisfactory score. Additionally, for certain courses, students who register for RIT course sections and successfully complete coursework through the KEY Program receive RIT academic credit.

In January 1988, Rochester Institute of Technology worked with the schools to deliver the American Politics component of a Social Studies course. Following the success of this pilot semester, the College of Continuing Education and the College of Science at RIT is working with the BOCES to deliver a package of college level, year-long courses beginning in September 1988. The courses are:

- Calculus
- English (Introduction to Literature and Introduction to Composition)
- Social Studies (Economics and American Politics)

Courses consist of five, 40 minute class meetings per week for the school year (divided into two semester courses). RIT faculty design the curriculum, plan day-by-day activities and evaluate individual student performance for each course in consultation with the participating schools. Organizational meetings between BOCES staff, RIT faculty and staff, and teachers from participating schools are held to develop curriculum, procedures, interactive teaching

and evaluation methods. The classroom teachers contribute their experience and understanding of the students and administer school-assigned activities and grades.

Faculty from RIT travel to the participating schools to meet with the students and teachers on a regular basis. Student campus visits and field trips are used to contribute to the instruction and motivation of the students.

Delivery System

Various instructional technologies are used to provide an effective distance learning experience. In keeping with RIT's philosophy of distance delivery and proven ability to offer distance learning, courses offered to students at a distance are of the highest quality. Interaction and flexibility are important components of the courses. To assure quality instruction, faculty are supported and assisted with the logistical arrangements necessary for distance delivered courses. Although students visit the campus infrequently, the curriculum encourages identification with RIT and students receive many of the privileges of on-site students.

Selection of the precise mix of delivery techniques varies from course to course depending upon the course content, instructor's style and available resources. In all cases, university instructors, school teachers and students are fully supported in the use of the various technologies for effective learning. Although the schools approached the university with the idea that two-way interactive television would be the preferred delivery technique, financial considerations and logistical obstacles made this improbable. Early meetings among the superintendents, BOCES and RIT personnel reaffirmed the desire to go ahead with course delivery using more affordable technologies. Enhancing the delivery methods would be possible if the organizational structure was in place supporting an academically sound program. Start-up costs were kept to a minimum avoiding the more expensive technologies.

For the pilot semester, no additional equipment was purchased. Fortunately, telephone lines were in place from a former project and each school owned a speakerphone. In addition, libraries were already equipped with computers and modems which they used to access the BOCES bulletin board. For the first American Politics course, teachers coordinated in-class work and insured students kept up and fully understood the material. Teachers also administered tests, coordinated student projects and led discussion sessions. The university faculty member came to the schools periodically to present special lectures and answer student questions. University visits were coordinated among all schools so that students came together on the same day to participate in seminars with area politicians and to take advantage of university facilities. Other components of the pilot course included videotapes from the *American Government Survey* series, weekly audioconferences with the RIT faculty member, library access via the on-line card catalog and interlibrary loan.

KEY Program courses during the 1988-89 school year will include one or more of the following components:

Prerecorded video demonstrations and lectures
Tapes are produced in RIT studios and/or purchased from educational production houses.

Live two-way audio and audiographic conferences
Live interactive writing systems are used for problem solving and discussion sessions. Students at all sites are able to "go to the board" to work on problems and have questions answered immediately via graphics and audio transmitted over phone lines. Telephone

conferences are used for discussion sessions and especially for teacher coordination meetings.

Computer conferencing & electronic mail
Utilizing RIT's Computer-based Communications system, or the BOCES bulletin board, students are able to communicate with the course instructor and each other. Participating teachers from the various schools are also able to use this flexible communication system to coordinate plans and communicate concerns with each other and the RIT faculty.

Study guides, texts, and other instructional materials
All course components are coordinated by custom designed study guides and outlines. Some courses also use software packages, demonstration kits, and other materials.

Because they are regular RIT courses, or are equivalent to Advanced Placement courses, the offerings are challenging. Students are expected to work at the college freshman level. Students who register to receive RIT credit are graded just as if they were on-campus students; credit must be earned by a passing grade. In every important respect, a KEY Program course is identical to the same course on campus. The learning objectives, testing, coursework and grading standards are the same. With the help of the school teachers from the participating schools, course design and delivery are sensitive to the needs of the high school audience.

Evaluation

Student response to the pilot section has been quite rewarding. Nearly all students felt that the course was a positive addition to their senior year and also indicated that the course met or exceeded their expectations. Students were not happy with the videotapes in the course, with three-quarters reporting the tapes did not contribute to their learning. The audio-conferences, on the other hand, were considered either most important or very useful by 85% of the students. Over eighty-five percent (88%) of the students felt that the in-class teacher was essential or very helpful to the course. In summary, most students agreed with their fellow student who wrote that the best thing about the experience was that it provided "the opportunity to experience college level work."

The school teachers' responses to the program were also good. They enjoyed the contact with the Institute and suggested they would like even more interaction. Teachers liked the opportunity to work with each other and with the college faculty. RIT issued adjunct faculty I.D. cards to the teachers in recoginition of their important role in the course. This allowed them to take advantage of many of the university's resources such as the library, recreation facilities, and reduced prices on speakers and artists series.

Conclusion

Beginning with the full program of three courses in Fall, 1988, PC based telewriter systems will be available to enhance the faculty lectures. Although students in the pilot section said they did not miss seeing the professor and found his lectures interesting even without visual support,this could be due to the nature of the American Politics course. It is expected that calculus and economics, in particular, will rely heavily on the addition of a telewriter system.

Although students found the videotapes to be the least helpful part of the course, the teachers still felt that they provided an important addition to the students' learning. Fewer tapes, or shorter sections of tapes, will be used in the future courses. For example,videotapes currently in production for the calculus course are only ten to fifteen minutes long and illustrate important or difficult concepts.

All students, faculty, teachers, guidance counselors and librarians will be more strongly encouraged to take advantage of the RIT Computer Communications system for administrative and instructional communications, including use of the RIT library facilities. Guidance personnel at the schools and the librarians will be involved more directly with the KEY Program in the 1988-89 school year. Facsimile machines will also be available for quick transfer of important course materials and library documents.

The university found the participation of the BOCES to be essential to the program. Coordination of school schedules, textbook orders, videotape distribution, equipment complications and meeting scheduling are all details which can sabotage a distance learning effort. In addition, financial arangements for the program could be made through one unit. If and when additional schools choose to participate in the program, the system is in place to accommodate their needs. RIT, L.S.W. BOCES, and the three school districts involved have developed a mutual respect and understand which has helped make the KEY Program successful. Without this close working relationship, this type of program would not be possible.